Building 427, Combined Primary Station
Fort Worden State Park
Port Townsend
Jefferson County
Washington

HABS No. WA-153

HABS
WASH,
16-PORTO
11-

PHOTOGRAPHS

HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service, Western Region
Department of the Interior
San Francisco, California 94102

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HISTORICAL AMERICAN BUILDINGS SURVEY

Western Region

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Building 427, Combined Primary Station, Fort Worden

Location:	Fort Worden State Park, Port Townsend, Jefferson County, Washington
Date of Construction:	1908
Present Owner:	Washington State Parks and Recreation Commission
Present Use:	None
Significance:	A part of the fire control system developed to enhance the coast defense fortifications built by the U.S. during the early 1900's.
Historian/Date:	David Hansen and Richard Clifton 1982

Common Name: BUILDING 427

Historic Name: F3 Building; Combined Primary Station

Building 427 is a rare example of tbe combined primary station, a specialized building developed in tbe early 1900's to aid in the management of coast defense gun batteries. It also exhibits a construction tecbnique that was once common in coast defenses prior to World War 1.

Building 427 bas its origins in tbe Barrancas system, a technique of fire control wbicb enhanced the coast defense fortifications huilt hy the United States at the turn of the century. Before the creation of the rigorously structured Barrancas system, there had been only minimal attention paid to how the weapons of a coastal fortification would actually be employed in the event of a naval attack. Usually there was a huilding in the vicinity of each large caliber gun battery wbicb housed a powerful ohservation telescope, but they tended to be scattered and did not pbysically lend themselves to the sort of control that typified military organizations. The Barrancas system imposed control and gave special purpose to the earlier structures as well as giving rise to tbe comhined primary station, which itself reflected tbe Barrancas ideals of fire control.

Tbe Barrancas system (so named because of its experimental use in 1903 at Fort Barrancas in Pensacola Harbor, Florida) was influenced to a considerahle degree by Garland Whistler, a Coast Artillery officer whose ideas beld sway in the early formative years of coast defense. Whistler believed tbat inexperienced militia officers and men would fill out the

fortifications in case of war, and he was concerned tbat militia officers commanding the batteries would not be able to withstand the rigors of naval bombardment and attack. His idea was to place these officers close to more experienced and more senior regular army members--individuals like Whistler himself. Whistler so stressed the idea of closeness that there was a design response in tbe form of the combined primary station. Almost always, one segment of the station was accupied by a Coast Artillery officer who had ultimate control over the occupants of the other sections in the building, and this was the case with Building 427.

Building 427 is a two story structure divided into three sections. In eacb section, the upper story was reserved for an observation room. From bere, the travel of naval vessels could be tracked through the area protected by the guns of the fort. The telescope in the observation room was mounted on a concrete pylon which rested on its own foundation; the pylons were structurally independent from the rest of the building. To the rear and below the observation room was the plotting room. It was here that the readings from tbe observation telescope were coupled with other data from another telescope located some distance away, and tbe results plotted diagrammatically to produce the range and elevation settings for the beavy guns. It was intended that the commanding officer for the gun battery would have bis station in the observation room; an interior opening allowed him to view the activities in the plotting room without changing bis location. Since tbe Fire Commander was in the same building, he could easily supervise tbe Battery Commanders assigned to bim.

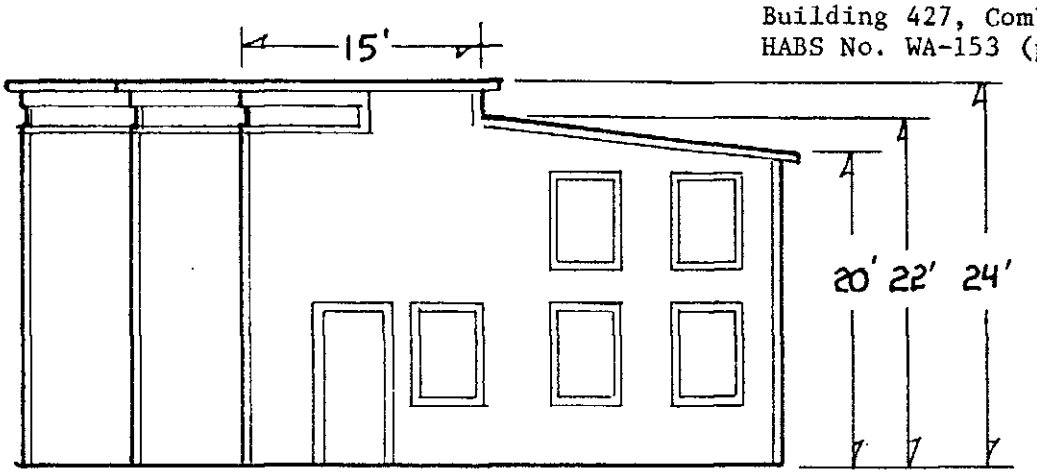
The three sections of Building 427 were assigned one each to Fort Worden's Third Fire Command, Battery Quarles, and Battery Randol. The Third Fire Command consisted of Batties Quarles and Randol as well as Batteries Stoddard, Putnam, and Vicars. Only batteries of long range guns had their own position finding facilities; the fire command gave approximate ranges to tbe small caliber batteries under its charge.

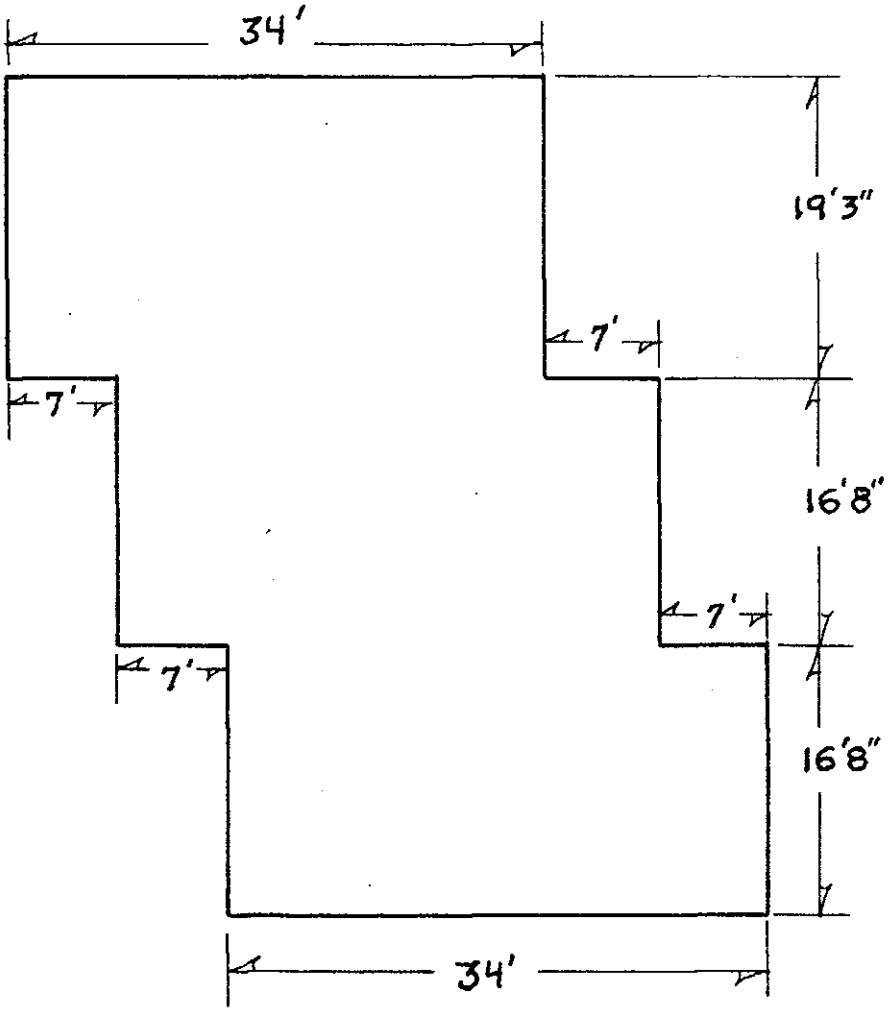
Building 427 was numbered as a result of the Army practices rather late in the life of Fort Worden. Prior to the 1930's, buildings were not usually assigned distinguishing numbers, but were referred to by their use. Building 427 was thus known to most Coast Artillery soldiers as the "F3 building." Similarly, tbey referred to each section according to its purpose, such as the "F3 station" or the "Quarles primary." Only generically was the building called a combined primary station. As the name suggests, the primary stations usually had secondary stations. The secondary station for the batteries associated with Building 427 still survives as Port Townsend's Golden Age Club, an activity center for senior citizens adjacent to Chetzemoka Park.

Fort Worden's remaining combined primary station is the last of three built at the post in 1908, and has outlasted others which were built at

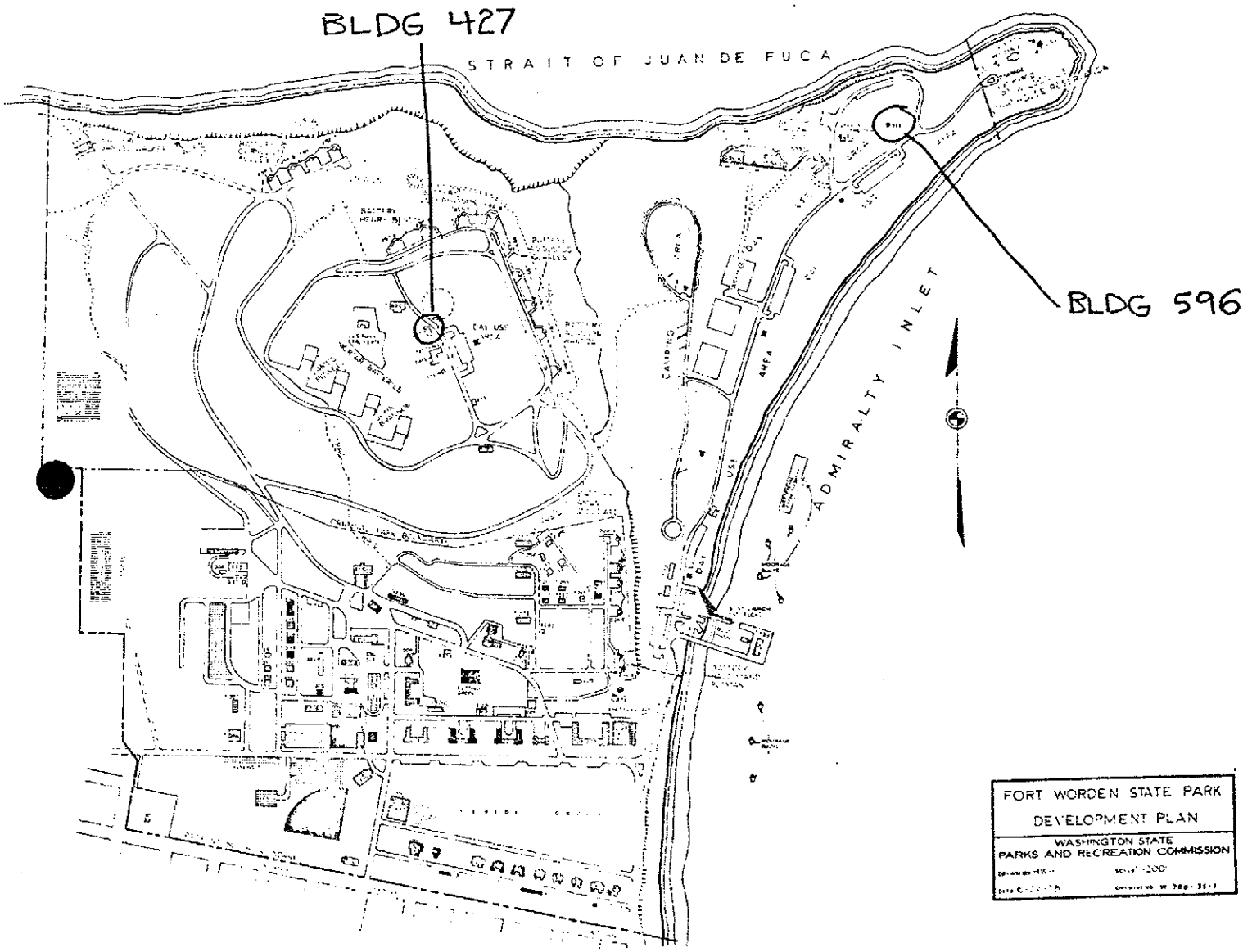
Forts Casey and Flagler. It is very probable that it is the sole remaining combined primary station in the United States. Certainly it is the only one on the west coast, and it is not known if a similar station in the former defenses of Baltimore is still extant.

Building 427 is also representative of Sewell construction, a building method adopted by the Corps of Engineers because of its economy, durability, and adaptability. Developed originally for fire control buildings by John Sewell, the structurally conventional buildings were clad with cement stucco over an expanded metal lath. The result was a fire-resistant structure that avoided the dampness associated with all-concrete construction. Since the buildings were lightly built and could not resist impact in a naval engagement, they were protected by berms or depressed building sites. Sewell construction was so flexible that it became standard for many types of service buildings in the defenses, and was especially useful in remote locations where protection against fire was a particular consideration. Building 427 is apparently the last example of Sewell construction on State Park property.





BUILDING 427 COMBINED PRIMARY STATION, FORT WORDEN


BLDG 427
STRAIT OF JUAN DE FUCA
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ADMIRALTY INLET
FORT WORDEN STATE PARK
DEVELOPMENT PLAN
WASHINGTON STATE
PARKS AND RECREATION COMMISSION